IN THE CLAIMS

1-10. (Canceled)

11. (Original) A video data multiplexing device comprising:

a plurality of encoding means for encoding program data respectively including video data, outputting resultant encoded streams, generating statistical multiplexing data required for control using statistical multiplexing, and outputting the generated data on the same transmission channels as the encoded streams;

multiplexing means for acquiring the encoded streams and the statistical multiplexing data from the respective encoding means via the transmission channels, conducting multiplexing processing on the encoded streams and the statistical multiplexing data at a first rate greater than a data transmission rate on a transmission channel of a subsequent stage, outputting first data including the statistical multiplexing data, conducting multiplexing processing on data obtained by removing the statistical multiplexing data from the data outputted from the respective encoding means, at a second rate equal to a data transmission rate on the transmission channel of the subsequent stage, and outputting second data which does not include the statistical multiplexing data to the transmission channel of the subsequent stage; and

encoding control means for acquiring the statistical multiplexing data of the respective encoding means from the first data outputted from the multiplexing means, and conducting control using statistical multiplexing on the respective encoding means on

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the basis of the statistical multiplexing data.

12. (Original) A video data multiplexing device according to claim 11, wherein the encoding means forms the encoded streams and the statistical multiplexing data respectively as packets and outputs the packets.

13. (Original) A video data multiplexing device according to claim 11, wherein the multiplexing means includes a multiplexing unit for acquiring the encoded streams and the statistical multiplexing data from the respective encoding means via the transmission channels, and multiplexing them, a first multiplexing control unit for controlling the multiplexing unit so that the first data may be outputted from the multiplexing unit at the first rate, and holding data obtained by removing the statistical multiplexing data from the first data outputted from the multiplexing unit, and a second multiplexing control unit for controlling the first multiplexing control unit so that the data held by the first multiplexing control unit may be outputted to the transmission channel of the subsequent stage at the second rate as the second data.

14. (Original) A video data multiplexing control method used in a video data multiplexing device including a plurality of encoding means for encoding program data respectively including video data and outputting encoded streams, multiplexing means for multiplexing the encoded streams outputted from controlling each of the encoding means, and encoding control means for controlling each of the encoding means, wherein control using statistical multiplexing is conducted on each of the encoding means by the encoding

control means, comprising:

a statistical multiplexing data output procedure in the encoding means for generating statistical multiplexing data required for control using statistical multiplexing, and outputting the generated data on the same transmission channel as the encoded streams are transmitted;

a multiplexing procedure in the multiplexing means for acquiring the encoded streams and the statistical multiplexing data from the respective encoding means via the transmission channels, conducting multiplexing processing on the encoded streams and the statistical multiplexing data at a first rate greater than a data transmission rate on a transmission channel of a subsequent stage, outputting first data including the statistical multiplexing data, conducting multiplexing processing on data obtained by removing the statistical multiplexing data from the data outputted from the respective encoding means, at a second rate equal to a data transmission rate on the transmission channel of the subsequent stage, and outputting second data which does not include the statistical multiplexing data to the transmission channel of the subsequent stage; and

an encoding control procedure in the encoding control means for acquiring the statistical multiplexing data of the respective encoding means from the first data outputted from the multiplexing means, and conducting control using statistical multiplexing on the respective encoding means on the basis of the statistical multiplexing data.

15. (Original) A video data multiplexing control method according to claim 14, wherein in the statistical multiplexing data output procedure, the statistical multiplexing data is formed as packets and outputted.

16-39. (Canceled)